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THE UNIVERSITY OF ALBERTA

WORK/LIFE VALUES OF REGISTERED NURSING ASSISTANT STUDENTS

by

Jack Dobbs

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF Master of Education

IN

COUNSELLING PSYCHOLOGY

Department of Educational Psychology

EDMONTON, ALBERTA

Fall, 1987

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Work/Life Values of Registered Nursing Assistant Students submitted by Jack Dobbs in partial fulfillment for the degree of Master of Education in Counselling Psychology.

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Date: 5. August. 1987

ABSTRACT

The purpose of this research is to provide data about the attitudes and values of Registered Nursing Assistant (RNA) Students in a ten month training program at the Alberta Vocational Centre in Edmonton, Alberta, Canada. One hundred forty-four participants completed two questionnaires for the study. The first questionnaire was a standardized instrument, the Life Roles Inventory (LRI). The second questionnaire examined students' expectations of the training program as well as the program's potential impact on their lives.

The three groups (Wait list, Current and Graduate) were analyzed statistically using a one-way analysis of variance to determine if there would be a significant difference among them. Three of the twenty work values on the LRI indicated significant differences between groups. The scales were Authority, Risk-taking and Physical Prowess.

The Salience Inventory of the LRI is comprised of three scales (Participation, Comittment and Opportunity). On the Participation Scale the following between group differences were found: Studying, Working and Leisure. The Comittment Scale revealed only one significant difference between groups, on Studying. On the Opportunity Scale the significant difference was also on Studying.

The second instrument, designed the author, examined what each of the three groups (Wait list, Current and Graduates) expected to attain as a result of completing the RNA program. A factor analysis confirmed the fourteen questions from the RNA Questionnaire would be represented by a cluster of questions that fit together on three dimensions; self-esteem, skill development, and income/job stability.

The RNA questionnaire also asked respondents to provide additional information about themselves. Results indicate many RNA students have had to overcome significant life events, with reportedly little support or encouragement. A number of cases are presented.

The mandate of the vocational centre is to assist disadvantaged adults in learning a viable skill and in obtaining employment. A concomitant objective of the Centre is to enhance psychosocial functioning. Some of the factors that students perceived as barriers to academic and personal success are noted.

Students report an improved self-concept, as well as having more hope for the future. The results are attributed to their decision to attend, participate and complete the RNA program.

Recommendations for further research and program changes are noted.

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CHAPTER ONE

STATEMENT OF THE PROBLEM

The purpose of this study has two principle functions. First, the study will test the hypotheses of Super, et al. (1979, 1981). Second, the study will examine the self-perceptions of the Registered Nursing Assistant students and their expectations of the training program's impact on their lives.

This first section will deal with Super's view of career development. This theory emphasizes the context of various life roles that an individual is engaged in. The importance of a particular life role has been noted to vary in relation to the individual's present life stage. The instrument utilized to test this theory is the Life Roles Inventory (LRI). Research using this instrument is now being reported by a number of researchers with specific populations(Fitzsimmons and MacNab, 1981; Madill, 1985; Crozier, 1986). The Life Roles Inventory was administered to a group of Registered Nursing Assistant (RNA) students at the Alberta Vocational Centre in Edmonton, Alberta, Canada.

Three groups were compared in this study (N=144). The first group (n=35) was comprised of those individuals who had met all of the selection criteria and were awaiting permission from the Registrar's office to enter the RNA program. Due to the limited intake of students into the

program and the high demand for it, prospective students may have to wait up to two years for entrance from the date of original application.The second group (n=86) was completing the ten month training program. The final group (n=23) had graduated from the training program within the previous year.

The first purpose of the study was to provide additional research data, using the Life Roles Inventory, to the body of literature. The second purpose of the study was to ascertain the self-perceptions and expectations of students in each of the three groups. Emphasis was placed on how students viewed the importance of their training, as it related to their personal lives and to their future professional role. Most of the literature reported in this field has dealt with Registered Nursing (RN) students. This study will focus on the RNA student.

There is a paucity of published information about this group of para-professionals in Alberta. At present there are more than eight thousand registered with the Professional Council of Registered Nursing Assistants in the Province of Alberta. In June of 1986 Registered Nursing Assistants were granted the right to increased self-government under the changing Alberta Health Care legislation. As a result this body is now responsible for its own discipline and ethical decisions, as well as promotion of community education and awareness.

TOPICS

This study examines the following topics:

1. The work values of RNA students.
2. Students' expectations of the training program.
3. Personal changes that RNA students report experiencing at different points in their training.

(Note: This study does not focus on the academic achievements or level of skill acquisition as provided by the training program).

CONCERNS:

1. To provide information and research data about a specific group of RNA students in Edmonton, Alberta.

2. To provide data about the Work Values and the Salience Scales of the Life Roles Inventory with this particular group of RNA sudents.

3. To note the expectations the RNA student has with regards to completion of the RNA training program (i.e. changes in socio-economic status, self-confidence, entry into a professional health care team, hope for the future).

4. To elicit the self-reported life changes of the RNA graduate (i.e. changes in socio-economic status, self-confidence, entry into a professional health care team, hope for the future).

The following are the research questions:

Research Questions

Research question #1

Are there significant differences in work values between groups of students as they move from being RNA candidates, to students, to graduates?

Research Question #2

Are there measurable differences between groups in relation to the Salience Scales of the LRI?

Research question #3

Are there positive changes as individuals move from being an RNA candidate to being a student to being a graduate according to the following dimensions?

i) self-esteem/positive self-regard

ii) skill development

iii) income/job stability?

Research question #4

Would student responses confirm that successful completion of the RNA Program has made a positive impact on their lives? And if so, how?

CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter contains a review of recent literature that has been reported in scientific journals and other scholarly writings. A brief overview of the Registered Nursing Assistant (RNA) program is provided as background information. The literature review is categorized into two main areas. First, research that has been conducted on the "Life Roles" theory is presented. The second major area of review relates to the training of Registered Nursing Assistants. In order to assist in understanding the issues and concerns of RNA students in training the following description is provided.

A. DESCRIPTION OF THE REGISTERED NURSING ASSISTANT PROGRAM

The Registered Nursing Assistant Program is ten months in length. It is designed to prepare students to work in a health care setting. The typical work setting of graduates would be in hospitals ranging from active treatment to extended care facilities. In larger urban centres in Alberta there is a move towards decreasing the number of RNAs in the active treatment hospitals while increasing the number of RNA graduates working in extended care facilities. The wage scale for RNA graduates as agreed to, by the Alberta Hospitals Association, is presently $11.28 per hour.

Additional payment is made for shift differential (i.e. evening or night shifts) as well as overtime requirements.

TRAINING SITES:

Only the Alberta Vocational Centres in the province have a mandate to train RNA students. The two central training centres are in Calgary and Edmonton. Six other centres have RNA programs on a limited enrollment basis.

MISSION STATEMENT:

The mandate of the Alberta Vocational Centre (AVC) is to work with disadvantaged (economically, socially, educationally) adults.

ENTRANCE REQUIREMENTS:

Applicants to this program must have completed grade ten (education level) with a successful completion in Biology Ten. The minimum entrance requirement will be changed to grade twelve in September of 1988.

DESCRIPTION OF THE RNA STUDENT CLASS:

At AVC Edmonton, thirty students are accepted into each class, and there are presently four intakes per year. Approximately twenty-three students graduate from each class. Slightly more than three hundred graduated from the eight centres in the province of Alberta last year.

MEANS TEST:

A means test is not required if the student is a fee payer. Fees are intentionally low; four dollars and fifty cents per week. Approximately forty per cent of each class are fee payers. The remainder receive funding from one of several sources; the Alberta Vocational Training Act (AVT), the Unemployment Insurance Commission (U.I.C.), Social Assistance, the Workers' Compensation Board, or Indian Affairs. The purpose is to assist the students that have been unemployed, underemployed, or who are seeking to continue upgrading their education, to gain a marketable vocational skill.

WAIT LIST TO GET INTO THE PROGRAM:

Once prospective students have met all of the admission criteria and been formally accepted, they are then placed on an "accepted" wait list. Prospective students may wait up to two years to start the Edmonton RNA program.

ASSESSMENT MEASURES:

Once in the program, students are tested daily on a competency based model to ensure that mastery of the current task has been achieved. These examinations are in the form of short computer scored quizzes (using an optical scanner) designed to provide students with feedback on the same day.

LEVEL EXAMINATIONS:

There are three major comprehensive examinations designed to assess the students' knowledge at three intervals, approximately at each third of the program. The exams are referred to as Level's One, Two and Three. After successful completion of the academic requirements the student has to complete Level Four, which is a one month work experience project in a hospital of their choice. At the final level each student is expected to perform all of the job duties of an RNA graduate.

CLINICAL PRACTICUMS:

Students at AVC Edmonton are given more experience in the active treatment facilities than are students in the AVC Calgary RNA Program. This reflects a difference in philosophy regarding the perceived role and place of the RNA graduate. Calgary has adopted a philosophy which considers the RNA as a key worker in extended care facilities but not in active treatment centres (Mercer, et al, 1986). The Edmonton students are placed in clinical settings after the first seven weeks of classroom instruction. These students are assigned to extended care facilities first and later to active treatment centres, for a total of seventy days in both areas. In the practicums, students spend one week in a hospital and then return to the classroom for one week. This is done in order that the student learns not only the

theoretical concepts in the classroom but has an immediate opportunity to implement the newly acquired skills and then return to the classroom where there is further emphasis on testing and assesment of the recently learned concepts.

MANPOWER NEEDS:

The RNA Programs across the province of Alberta are graduating in excess of three hundred students per year at the present time. Of this number more than 65 percent report having obtained work in their field. The major variable with regards to finding work seems to be whether the students are willing to relocate to smaller centres in the province rather than insisting on remaining in the large urban centres of Edmonton and Calgary. Smaller centres appear to provide an enhanced possibility of securing employment. Other crucial questions that the RNA graduates must ask themselves include: are they willing to work part-time, or to work two part time jobs in order to earn an income equivalent to a full time salary?

JOB DUTIES:

The duties of an RNA are to provide basic nursing care to patients while acting as a backup support to the other members of the nursing team. The RNA is the entry level position to the team nursing unit.

A brief description has been provided of the Registered Nursing Assistant program at the Alberta Vocational Centre in Edmonton, Alberta. The next section will deal with the theoretical concept of "Life Roles" as defined by Super and as well as its application to the RNA population described.

B. LIFE ROLES THEORY:

This section will focus on the work of Super (1980) and his theory of career development. His attention to the life-span, life-space developmental perspective seems particularly appropriate to the population of this study. The RNA student may well be attempting to balance, or "juggle" various life roles at the same time, with some role conflict likely resulting (i.e. between roles such as parent, student, worker, etc.).

Super has defined career as follows:

> The course of events which constitute a life; the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total pattern of self-development; the series of renumerated and non-renumerated positions occupied by a person from adolescence through retirement, of which occupation is only one; includes work-related roles, such as those of student, employee, and pensioner along with complementary avocational, familial, and civic roles. Careers exist only as people pursue these; they are person-centered (Super, 1976, p. 4).

This quotation is relevant to many of the RNA students. These students typically report difficulty dealing with the

multiple life roles simultaneously. This seems especially true of the single parents with several young dependents. The framework of Super has been particularly useful in explaining the level of stress that these students report as they attempt to fullfill the requirements of the various life roles(i. student, parent, worker, etc.).

WORK IMPORTANCE STUDY:

The Work Importance Study (WIS) began in 1979 under the direction of Professor Donald Super. There were sixteen countries participating from various industrialized nations. The purpose was twofold. First, the mandate was to determine the significance of the role of work for an individual, especially in relation to the other roles in one's life. The second purpose was to develop a set of cross-culturally valid assessment measures. Each of the sixteen countries was to develop an instrument that was relevant in their own country and also internationally.

VALUES SCALE:

The Life Roles Inventory(LRI) is composed of two separate assessment tools. The first is known as the Values Scale. It is comprised of a total of 100 items containing 20 distinct work values. The items are thought to be values that most people seek in life.

SALIENCE INVENTORY:

The Salience Scales are designed to measure behavioral and affective components of five major life roles: student, worker, citizen, homemaker and leisurite. This instrument does not attempt to measure the cognitive aspects of a role. Other assessment measures are available for this purpose (i.e. the Career Development Inventory, Super, et al, 1981).

CAREER RAINBOW:

A concept that is central to understanding the psychological dimension of Super's (1980) work is the Career Rainbow. Super originally hypothesized a total of nine different life roles that each individual normally experiences during her or his development from birth to death. These roles are (1) Child (2) Student (3) Leisurite (4) Citizen (5) Worker, (6) Spouse, (7) Homemaker, (8) Parent and (9) Pensioner. The "role" as defined by Super refers to the expectations as well as the performance that one holds towards any one role.

LIFE THEATRES:

The four arenas as described by Super, where the major life dramas of one's life unfold are; home, community, school and the workplace. There are often distinct roles and specific behaviors ascribed to the separate theatres noted. It is obvious that a role behavior will often intrude into the other arenas as each cannot necessarily be kept separate and mutually exclusive. This is especially true since an

increasing number of individuals, both men and women, are involved in several of the arenas simultaneously. In previous decades, in North American culture at least, there was much more emphasis placed on the acting out of one role, or lifescript, at a time.

Fitzsimmons, Macnab, and Casserly (1985) were responsible for the Canadian Norming Study. The various Canadian groups represented a cross-section of the population in terms of gender, age and occupational groups. A total of 6382 adult subjects' LRIs were returned. Of these, 5160 were English and 1222 were French. Of the total sample 65% were female and 35% were male. A majority of individuals were working (78%), while 13% were unemployed and 9% described themselves as homemakers.

Continuing research using the Life Roles Inventory is being completed to classify different occupational groups in Canada, using this taxonomy. Two recent studies have been completed. Madill (1985) studied over 1300 Occupational Therapists in Canada. More than ninety percent were women and the majority had a four year undergraduate degree in Occupational Therapy. Crozier (1986) completed a study of 171 school teachers in Calgary, Alberta.

The next section will address a review of literature regarding issues that relate to nursing assistant students.

C. RELATED NURSING STUDIES

PREDICTING ACADEMIC SUCCESS OF NURSING STUDENTS:

In searching for recent studies predicting the academic success of RNA graduates there was a noted paucity of scholarly literature. Consequently, studies of related para-professional (i.e. Licensed Practical Nurses) as well as other levels of nursing programs (i.e. Diploma and B. Sc.) have been included. In some cases it will be necessary to infer meaning and to consider the perspective of the general profile of the RNA population.

Bledsoe (1981) in a study of Practical Nursing students found that a number of academic factors correlated well to job performance of graduates of this program. The Licensed Practical Nursing Program (LPN) is most similar to the RNA designation in terms of course content, length of training and job description. Bledsoe (1981) determined that marks from High School, Admission testing results, performance in competency based examinations and clinical evaluations were central determinants of scholastic success as well as being good predictors of job performance.

Oliver (1985) has reported very similar findings in regards to selection criteria as predictors of academic

success for students enrolled in an associate degree nursing program. The behavior of students of this type of program would likely be most similar to the RNA graduates wanting to continue their education by obtaining a community college RN Diploma.

Dell (1984) has studied the issues regarding minorities overcoming barriers to becoming successful in a nursing program. In her study of 456 black students enrolled in a Bachelor of Science Nursing program the author sought to delineate predictors of success as defined by passing the nursing school examinations as well as the State Board examinations. Results from this study were not optimistic as most of the black students (275 out of 456) did not complete their programs. Dell calls for a closer scrutiny of some of the variables that might be interfering with the students successful completion of the program. This population may well be similar to the students of the RNA program in that many are from minority groups, including a number of recent refugee immigrants.

In a similar study, Boyle (1986) looked at the critical factors in predicting success of minority students in a nursing program. The results were particularly troubling in that not one of the minority students completed the nursing program that was being studied. It was noted that there were a number of barriers, not just academic, but many social and life role factors, that were not taken into consideration by

the nursing school. Boyle noted that there were no special allowances or consideration of possible options in assisting the previously aforementioned students of minority groups. The type of non-completions from the above-noted programs may well have a detrimental effect on the self-concept of the student.

Bolye notes that despite the wealth of studies on the academic factors influencing success of students, little is known about minority students. She states that 32.2% of baccalaureate nursing schools reported altering their admission criteria to assist entry of minority students (Feldbaum and Levitt, 1980); yet, very few studies of minority students' in nursing schools, or in para-professional roles, such as the RNA, have been reported. Predictors for caucasians are not particularly useful for minorities and vice versa (Haney, Michael, and Martois, 1977). Claerbaut (1987) calls for research related to minorities in nursing education to allow effective instructional design.

There is mounting evidence that attrition cannot be adequately predicted by cognitive factors alone, as less than 50% of attrition is related to academic difficulty (Schirwin, 1977a). Boyle predicts the impact of non-cognitive factors on educational success to be even greater among minorities that experience economic and social disadvantages.

On a more positive note, in a study by Silvers(1984) on the effects of self-evaluation, she found that allowing students the opportunity for self-evaluation, as opposed to continual Instructor evaluation yielded a positive result. The competency level as well as the self-esteem of the students was reportedly improved by this method of evaluation.

DeBack and Mentkowski (1986) questioned whether the level of education matters in performance once the nurse is oriented to a particular setting, or whether the assumed advantages of a Bachelor of Science degree in Nursing can be substituted by on the job training and experience. The authors report that B. Sc. graduates demonstrated more nursing competencies than did nurses with less academic education. The results indicate however, that there were a number of competencies and tasks that the non-B. Sc. grads did perform most adequately. While acknowledging a subtle hint of an interaction between the variables of experience and education, it is argued by Deback and Mentkowski that there is not a strong parallel between the two variables.

The authors argue in favor of increased educational requirements for para-professionals. Deback and Mentkowski conclude that education promotes a broader range of abilities than experience does. One of the strongest arguements presented for higher educational requirements is that the more highly educated a nurse is, the less likely

she or he is to incorrectly conceptualize various treatment situations. This of course could be critical as nurses are often the first ones to respond to an emergency situation. A resulting inappropriate assessment and response, could be fatal to a patient.

Harvey and France (1987) explore the relationship between two groups of nurses, full-time employed R.N.s and full-time B. Sc. students. The latter group was required to have at least two years of nursing experience as an R.N. prior to being admitted to this particular B.Sc. program.

The study was concerned with the degree that might exist between manifest and job-related needs in comparison to job satisfaction. This type of approach has been widely studied (Tolbert, 1980; Campbell & Holland, 1972; and Holland, 1986). The authors found that nurses in general are classified, according to Holland's codes, as being Social and Investigative. According to this theoretical supposition nurses exhibit characteristics such as achievement, dominance, helpfulness, succor, and responsibility.

The results obtained by Harvey and France (1987) illustrate the differences in terms of manifest needs and expectations regarding job duties and job satisfation. The working R.N.s indicated a higher degree of satisfaction with the work itself while the B. Sc. nurses clearly focused on the long range goals of teaching, supervisory activities, and management functions. Grade point averages for the two

groups indicated that the B.Sc. group had consistently higher marks.

PSYCHOLOGICAL FACTORS AFFECTING SUCCESS:

The following studies describe research projects which focus on the psychological factors impacting on the academic success of nursing students. Dufault(1985) demonstrated the importance of enhancing internal locus of control with a group of RN students. The author used a basic pre-test post-test design. The Rotter Internal-External Locus of Control Scale was the instrument used. There were two groups, a treatment and a control group of 32 students each. Participants in the treatment group were exposed to a five week course entitled "Transition into a Professional Nurse Role". The control group received no intervention. The results indicated that a future oriented course, such as the one mentioned above, would be of benefit in enhancing Internal Locus of Control. A similar type of program would be of benefit with the AVC population of RNAs as well. A preliminary needs assessment study would be beneficial in determining this.

Hammer and Tufts (1985) argue that the nursing profession, and especially Nursing educators, must accept some responsibility for the perception that nurses suffer from a lack of self-esteem.

SELF CONCEPT:

Hilbert (1985) studied the effects of social support on educational outcome. His study demonstrated a positive effect on educational standing of a group of nursing students that focused on peer support and interpersonal communication.

Olson, Gresley and Heater (1984) sought to determine if nursing students' self-concept could be enhanced by participation in an eight week clinical course. The mini-course did not focus on nursing technique or patient care but rather the emphasis was on issues like perception of competence in critical care, teaching/collaboration, planning/evaluation, professional development, leadership, interpersonal skills, and communication.

No significant differences were noted. The authors conclude that the number of nursing interns and non-interns was too small, consequently the results were too low to be statistically significant. The rationale by the authors is that the "generic" program in nursing at their university provides a strong conceptual and practise base to students so that a specialized clinical program of skill enhancement is unnecessary. The authors also question whether the pretest-postest of the instrument used (the 6-Dimension Scale) is sensitive enough to detect behavior changes if such occur.

Olson, Gresly, and Heater note that self-confidence and self-esteem are reported to decrease with each year in a nursing curriculum (Ellis, 1980). The authors suggest that the effects of the experimental treatment would be more evident with a program which does not provide as comprehensive and thorough a program as their B. Sc. program.

Southern and Smith (1983) addressed the problem of retaining skilled nurses in the workforce. The method of treatment was a multimodal approach to be used with as they enter a nursing program. The goal of the treatment was to decrease the attrition rate once students had completed their training and had been working in the field for year or more.

A variety of techniques were employed and the experimental group demonstrated effective gains in assertiveness, sex role flexibility, personal adjustment and career comittment. An interesting outcome of the study revealed that while seventeen freshmen nursing students started the study only nine students remained in the nursing program after the first semester. All participants reported significant personal gains as a result of participating in the experimental course in multi-modal counselling. Southern and Smith assert that the heightened self-awareness and potential for personal growth contributed to almost 50% of the students deciding to change career paths.

Several facets of allied health education have been reviewed in an effort to provide an overview of current research regarding both academic and non-academic factors that might influence success in a nursing assistant training program.

CHAPTER THREE

METHOD

Research question #1

1. Are there significant differences in work values between groups of students as they move from being Registered Nursing Assistant candidates, to students, to graduates?

Research question #2

2. Are there measurable differences between groups in relation to the Salience Scales of the Life Roles Inventory?

Research question #3

3. Are there positive changes between groups according to the following dimensions?

i) self-esteem/positive self-regard

ii) skill development

iii) income/job stability?

Research question #4

4. Would student responses confirm that successful completion of the RNA Program has made a positive impact on their lives? And if so, how?

INSTRUMENTS: Two instruments were used in this study. The Life Roles Inventory and an instrument designed by the investigator. The following is a description of the two instruments.

LIFE ROLES INVENTORY

The Life Roles Inventory (LRI) is composed of two separate assessment tools. The first is known as the Values Scale. It is comprised of a total of 100 items containing the 20 separate work values. The items are thought to be values that most people seek in life and they are thought to be valid cross-culturally(Super, et al, 1981). There are five items per scale. A listing of the twenty work values is provided:

1. Ability Utilization
2. Achievement
3. Advancement
4. Aesthetics
5. Altruism
6. Authority
7. Automony
8. Creativity
9. Economics
10. Life Style
11. Personal Development
12. Physical Activity
13. Prestige
14. Risk
15. Social Interaction
16. Social Relations
17. Variety
18. Cultural Identity
19. Physical Prowess
20. Working Conditions

The following instructions are given for the Values Scale.

"For each of the following statements, indicate how important it is to you."
"It is now or will be important for me to..."

1. Use all my skills and knowledge
2. Obtain results that show I have done well
3. Get ahead

The 100 statements are rated on a 4 point Likert type scale with the following values:

1= little or no importance
2= of some importance
3= important
4= very important

VALIDITY OF THE VALUES SCALES

Face Validity

Project Directors of the Work Importance Study (WIS) reached agreement regarding the categorization of items and the acceptance of the definition of the work values. The recognition of the Project Directors as having expertise in their fields and their subsequent agreement on the values scale helps assure face validity.

Construct Validity

A factor analysis of the data from norming samples confirms a general consensus of a factor structure. Five factors were found and are reported in the

Canadian Technical Manual (Fitzsimmons, MacNab, and Casserly, 1981).

SALIENCE INVENTORY

The Salience Inventory is comprised of three different scales. There are 170 questions in this Inventory. The respondent is first asked about activities that he or she is actually doing or has done recently. Second, the degree of comittment to each of the five life roles is determined. Finally the respondent is asked what opportunity they see now or in the future to participate in activities relating to the five roles.

The instructions for this section of the survey are as follows.

> Here you are asked to tell about some of the things that you do in each of the kinds of activities to which you give some time, and then to to show how you feel about doing them. You may need to consider time in some questions and amount or quantity in others. Please read each statement carefully, then use the scale of 1 to 4, as given below, to show how true the statement is of you(or how much it applies to you) in each of the five activities:
>
> 1. means...Never or rarely OR...Little or none
> 2. means...Sometimes OR...Some
> 3. means...Often OR...Quite a lot
> 4. means...Always/almost always OR...A great deal

There are three scales which comprise the Salience scales. The total instrument is a 3 x 5 dimension. The following is a description of each of the scales.

PARTICIPATION

The participation scale is behavioral in content because it asks what you are doing or have done recently according to each of the five life role activities (studying, working, community service, home and family and leisure activities).

There are a total of 50 items in the participation scale. The respondent rates fourteen activites or situations according to the five life roles. The Likert responses have the following values: 1 for Never or Rarely, 2 for Sometimes , 3 for Often, and 4 for Always or Almost Always. There are a total of 10 different stems for the Participation scale. An example of one test item is provided below:

Question #1. I have spent or do spend time in...

1. studying	1	2	3	4
2. working	1	2	3	4
3. community service	1	2	3	4
4. home and family	1	2	3	4
5. leisure activities	1	2	3	4

COMITTMENT

The second component of the Salience Inventory is affective in content as it asks, how you feel about the five life roles activities. There are again fifty questions using 10 stems. The respondent rates the five different activities on the four value Likert type scale. The comittment scale is very similar in construction to the participation scale, with the

difference being the stems denoting the affective factors.

The following is an example of the Comittment scale.

Question G. I feel personally involved in . . . . . .

1. studying	1	2	3	4
2. working	1	2	3	4
3. community service	1	2	3	4
4. home and family	1	2	3	4
5. leisure activities	1	2	3	4

ROLE VALUES GRID

The third scale of the Salience Inventory is the Role Values Grid. This scale is also affective in nature but asks the respondent to note what opportunity they percieve now or in the future for seeking activities in the life role values. There are 14 stems in this scale which represent 14 of the values in this section. There are 70 questions in the final section of the Salience scale. Two sample questions are provided.

WHAT OPPPORTUNITY DO YOU SEE NOW OR IN THE FUTURE TO...

A. Use all my skills and knowledge in. . . . . .

1. studying.	1	2	3	4
2. working	1	2	3	4
3. community service	1	2	3	4
4. home and family	1	2	3	4

B. Be good at. . . . . .

6. studying, ...	1	2	3	4
7. working	1	2	3	4
8. community service	1	2	3	4
9. home and family	1	2	3	4

2 = Some
3 = Quite a lot
4 = A great deal
NA = Not Applicable

Reliability of the Salience Inventory

The internal consistency levels appears quite acceptable as the alpha coefficients range from .83 and .95

Test-Retest

The median test-retest coefficient (English version) is 0.73, where the lowest coefficient being 0.66 (Comittment to Work) with the highest coeffefient being 0.81 (Comittment to Community Service).

RNA QUESTIONNAIRE

DEVELOPMENT OF THE INSTRUMENT:

In order to assess the RNA students according to the questions raised in the study it was necessary to design an instrument that would address the noted concerns.

The questionnire was designed to be administered to all three groups (Wait list, Current, and Graduate groups), with a verb tense being the only change (Appendix A). There are twenty-five questions in total.

The first section lists fourteen statements and requires responses to a 5 point Likert rating. These responses are recorded on the LRI test booklet in the "Special Survey Section".

The following is an example of one statement, from the first fourteen questions.

"I have more self-confidence than one year ago."

1. STRONGLY AGREE
2. AGREE
3. NEITHER AGREE OR DISAGREE
4. DISAGREE
5. STRONGLY DISAGREE

The investigator designed fourteen statements to address the following concepts:

i) self-esteem/positive self-regard

ii) skill development

iii) income/job stability

An analysis of variance is computed for each of the three groups. Where significant differences are found, post hoc comparisons using the Scheffe F method are subsequently employed. Any pair-wise difference at the 0.050 level is reported. In order to test the interrelationship of the three factor construct a factor analysis was utilized.

Questions 15 through 18 ask about level of income, number of dependants, responsibility for family support, and employment status. Responses to the

questions 19-25 are to be written on the RNA Questionnaire form and not in the LRI booklet. Questions 19-22, and 24 are open-ended questions giving the respondent the opportunity to express opinions or feelings. Selected responses from these questions are to be noted in Chapter Five.

PROCEDURE:

A mail out questionnaire was provided to all of the participants on the wait list and in the graduate group. The students in the Current category were administered the noted tests during regular class times. The instructions to the current group were no different than the instructions given to the participants who were completing the mail out questionnaire. The instructions to the current group were intentionally kept to a minimum in order not to unduly influence this group of respondents.

SUBJECTS:

A total of 144 subjects completed questionnaires for this study. Three groups were designated to participate; a Wait-List group, a Current group, and a Graduate group. Responses were originally solicited from 80 participants in each of the three categories. The response rate was less than expected for all categories initially, especially in the wait list and

graduate categories. Efforts were extended to increase the number of respondents but the only real gains were from the current students. The following is a listing of the category responses.

WAIT LIST	CURRENT STUDENTS	GRADUATES	= TOTAL N
35	86	23	144

In order to provide information about the population to be studied data is presented noting the gender, marital status and years of education for each of the three groups, as well as all groups combined.

The Wait-List Group (n=35)

The first group was comprised of the accepted wait list to the Registered Nursing Assistant Program at the Alberta Vocational Centre in Edmonton. All participants from this group had already been admitted to the program but were awaiting openings in upcoming class registrations. There are presently four courses offered per year. Due to the demand for the program, some students wait up to two years to gain entrance to the program.

The following tables are frequency distributions of males and females involved in the study, as well as their marital status and years of previous education.

TABLE I

Gender (Wait-List)

Gender	Frequency	Percent
Missing	1	2.9
Female	29	82.9
Male	5	14.3
TOTAL	35	100.00

TABLE II

Marital Status (Wait-List)

Value (Married)	Frequency	Percent
Never	14	40.0
Now	15	42.9
No Longer	5	14.3
Missing	1	2.8
TOTAL	35	100.00

TABLE III

Previous Education (Wait list)

Years of Education (Total)

Value	Frequency	Percent
1 (Up to 8 years)	-	-
2 (9 to 11 years)	6	17.1
3 (12 to 13 years)	25	71.4
4 (14 to 16 years)	3	8.6
5 (17 or more)	1	2.9
6 Missing	1	3.5
TOTAL	35	100.0

Mean 2.912 Median 3.00 Std. Dev. .514

THE CURRENT GROUP (n=86)

This group is comprised of students of AVC Edmonton RNA students who were near completion of the ten month training course. Students were tested at approximately the eight month point. This ensures all students have ample clinical experience in both Extended Care facilities as well as Active Treatment hospitals.

TABLE IV

Gender (Current Students)

Gender	Frequency	Percent
Missing	3	3.5
Female	76	88.4
Male	7	8.1
TOTAL	86	100.00

TABLE V

Marital Status (Current Students)

Value (Married)	Frequency	Percent
Never	34	40.0
Now	34	42.9
No Longer	15	14.3
Missing	3	2.9
TOTAL	86	100.00

TABLE VI

Previous Education (Current Students)

Years of Education (total)

Value	Frequency	Percent
1 (Up to 8 years)	3	3.5
2 (9 to 11 years)	18	20.9
3 (12 to 13 years)	47	54.7
4 (14 to 16 years)	12	14.0
5 (17 or more)	2	2.3
Missing	4	4.7
TOTAL	86	100.0

Mean 2.902 Median 3.00 Std. Dev. .780

The Graduate Group (n=23)

This last group is comprised of former students who successfully completed the AVC Edmonton RNA program within the past year.

TABLE VII

Gender (Graduates)

Gender	Frequency	Percent
Female	21	91.3
Male	2	8.7
TOTAL	23	100.00

TABLE VIII

Marital Status (Graduates)

Value	Frequency	Percent
(Married)		
Never	12	52.2
Now	7	30.4
No Longer	4	17.4
TOTAL	23	100.00

TABLE IX

Previous Education (Graduates)

Years of Education (total)

Value	Frequency	Percent
1 (Up to eight years)	1	4.3
2 (9 to 11 years)	5	21.7
3 (12 to 13 years)	14	60.9
4 (14 to 16 years)	3	13.0
5 (17 or more)	-	
6 Missing	-	
TOTAL	23	100.0

Mean 2.826 Median 3.00 Std. Dev. .717

TABLE X

Gender (All 3 groups)

Gender	Frequency	Percent
Missing	1	.7
Female	130	90.3
Male	13	9.0
TOTAL	144	100.00

TABLE XI

Marital Status (All 3 groups)

Value (Married)	Frequency	Percent
Never	60	42.9
Now	56	38.9
No Longer	24	17.1
Missing	4	2.8
TOTAL	144	100.00

TABLE XII

Previous Education (All 3 groups)

Years of Education (total)

Value	Frequency	Percent
1 (Up to 8 years)	4	2.8
2 (9 to 11 years)	29	20.1
3 (12 to 13 years)	86	59.7
4 (14 to 16 years)	18	12.5
5 (17 or more)	2	1.4
6 Missing	5	3.5
TOTAL	144	100.0

Mean 2.892 Median 3.00 Std. Dev. .709

LIMITATIONS : The theoretical and methodological limitations to the study are noted as follows:

1. Self-Report Scales. There is an inherent danger in the use of these scales-their subjectivity. Both of the instruments used in this study are within this category thus results should be interpreted cautiously.

2. The sample size from the Graduate group was less than thiry (n=23). A larger return rate would have been preferred.

3. The low response from the graduates is cause for concern. Of the graduates who did respond only one did not have employment. At issue is the number of possibly unemployed graduates who did not bother to reply. It has been confirmed, by the AVC Edmonton Research Department, that often only the graduates who are working respond to such surveys.

4. The three different groups (Wait-List, Current and Graduates) used for comparison may be fundementally different.

5.The RNA student population (AVC Edmonton) may not be generalizable to other student populations (i.e. academic upgrading or skill training courses) within the same training centre.

6. The author does not maintain that all RNA students meet the AVC Mandate of assisting the economically disadvantaged population.

7. The author does not generalize these findings to all paraprofessionals within the health care field (i.e. all Nursing Assistants, Nursing Aides, Attendants, Orderlies, etc.).

DELIMITATION:

1. This study was delimited in that the subjects were comprised of three groups associated with the Registered Nursing Assistant (RNA) program at the Alberta Vocational Centre in Edmonton, Alerta, Canada. The first group, the Wait-list group was awaiting commencement of the ten month RNA program. The second group, the Current group, was tested at approximately the eight month point in training. The third group, the Graduate group, had graduated from the RNA program within the previous year.

In conclusion, the researcher has presented a number of different variables that are necessary for the understanding of the population being studied, as well as information required for replication of the study.

Results of this study are noted in the following chapter.

CHAPTER FOUR

RESULTS

In this chapter each research question is addressed and the results of the study are provided.

The analysis of the test data is reported for the Life Roles Inventory and also the RNA Questionnaire. The number of cases included in the study is 144.

ANALYSIS OF THE DATA

Research question #1

1. Are there differences in work values between groups of students as they move from being RNA candidates, to students, to graduates?

Of the twenty different work values on the LRI three showed a level of significance between the different groups, at 0.05 point or higher. The statistical measurement was Sheffe's F Test of Significance. This particular device is cited in Kerlinger(1981), Ferguson(1983), and in the SPSS-X Manual (1986) as being a good measurement device for comparing differences between groups. The Scheffe's Test is reputed for its cautious estimates of significance. Sheffe himself stated that perhaps test data should even be

considered significant at the 0.10 level due to the conservative nature of the instrument. Results are reported here at the more cautious level of 0.05 thus leaning towards a slight possibility of underreporting results as significant. This is preferable to the opposite direction, which could potentially result in findings that are spurious in nature and typical of a type II error.

Work Values of RNA Students

The rank ordered results of the 20 work values for the participants (pooled responses) are reported:

1. Altruism
2. Personal Development
3. Ability Utilization
4. Achievement
5. Social Relations
6. Economics
7. Prestige
8. Aesthetics
9. Advancement
10. Social Interaction
11. Working Conditions
12. Physical Activity
13. Autonomy
14. Lifestyle
15. Variety
16. Authority
17. Creativity
18. Cultural Identity
19. Physical Prowess
20. Risk-taking

N=144

VALUES SCALE

Three of the twenty work values reached levels of significance between the different groups. They were Authority, Risk-Taking and Physical Prowess. The following tables show the differences on each of the noted scales. The response categories used the following 4 point Likert rating.

AUTHORITY

Group one, the Wait-List students, reported the highest scores on this scale and the second group, the Current students, indicated the least affinity for this value. It is interesting to note the reported values for this scale increased in the Graduate group.

TABLE XIII

ANALYSIS OF VARIANCE

AUTHORITY

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	2.8697	1.4349	5.3249	.0059
WITHIN GROUPS	140	37.7246	.2695		
TOTAL	142	40.5943			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 1 (2.9324) versus Group 2 (2.5895)

	Mean	(Range is from 1-4)
Group 1	2.9324	
Group 2	2.5895	
Group 3	2.7043	

RISK-TAKING

The second highest significant difference found between the three groups was the value of Risk-taking. The Wait-List again reported the highest level of responses on this scale with the Current students again showing the least amount of risk-taking activity.

TABLE XIV

ANALYSIS OF VARIANCE

RISK-TAKING

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	2.5820	1.2910	3.6869	.0275
WITHIN GROUPS	140	49.0223	.3502		
TOTAL	142	51.6043			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 1 (2.3382) versus Group 2 (2.0128)

	Mean
Group 1	2.3382
Group 2	2.0128
Group 3	2.1130

Group one, the Wait-List group, reports the highest scores on the scale and the second group, the current students, indicates the least affinity for the scale. It is interesting to note that the reported values of the graduates increased, once again indicating the possibility of a rebound effect between the second and the third group.

PHYSICAL PROWESS

This third value also shows significant differences between the three groups with the Wait-List students showing the highest score for this value and the Graduate group reporting the lowest scores.

TABLE XV

ANALYSIS OF VARIANCE

PHYSICAL PROWESS

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	5.2601	2.6301	6.4767	.0020
WITHIN GROUPS	140	56.8511	.4061		
TOTAL	142	62.1112			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 1 (2.7588) versus Group 3 (2.2435)

Group 1 (2.7588) versus Group 2 (2.3337)

	Mean
Group 1	2.7588
Group 2	2.3337
Group 3	2.2435

The wait group attributes the most importance to physical prowess. The graduates rate it only slightly lower than the current students.

Research question #2

2. Are there measurable differences between groups in relation to the Salience Scales of the LRI?

I. SALIENCE SCALES

1.PARTICIPATION

TABLE XVI

ANALYSIS OF VARIANCE

PARICIPATION IN STUDYING

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	10.9776	5.4888	12.2007	.000
WITHIN GROUPS	140	62.9831	.4499		
TOTAL	142	73.9607			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 2 (2.8488) versus Group 3 (2.1261)

Group 2 (2.8488) versus Group 1 (2.4559)

	Mean
Group 1	2.4559
Group 2	2.8488
Group 3	2.1261

These results were anticipated as group two, the current students, spend more time studying than the wait-list group or the graduate group.

TABLE XVII

ANALYSIS OF VARIANCE

PARTICIPATION IN WORKING

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	5.2100	2.6050	5.5945	.0046
WITHIN GROUPS	140	65.1889	.4656		
TOTAL	142	70.3989			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (2.9043) versus Group 2 (2.4453)

	Mean
Group 1	2.7735
Group 2	2.4453
Group 3	2.9043

Group three spends the most time working. This was the expected response. Group two spends the least time working.

TABLE XVIII

ANALYSIS OF VARIANCE

PARTICIPATION IN LEISURE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	2.8618	1.4309	3.4805	.0335
WITHIN GROUPS	140	57.5564	.4111		
TOTAL	142	60.4182			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 1 (2.8618) versus Group 2 (2.5244)

	Mean
Group 1	2.8618
Group 2	2.5244
Group 3	2.5522

The wait list group spends the most time in lesiure time activities while the current students report the lowest score for engaging in leisure time activities. This was the expected outcome for all three groups.

2.COMMITTMENT

TABLE XIX

ANALYSIS OF VARIANCE

COMMITTMENT TO STUDYING

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	10.9465	5.4732	10.5801	.0001
WITHIN GROUPS	140	71.9063	.5173		
TOTAL	142	82.8527			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (2.3652) versus Group 2 (3.0647)

Group 3 (2.3652) versus Group 1 (3.2000)

	Mean
Group 1	3.2000
Group 2	3.0647
Group 3	2.3652

This was the expected outcome for all groups.

3.ROLE VALUES (Opportunities now or in the future)
(for STUDYING,

TABLE XX

ANALYSIS OF VARIANCE

OPPORTUNITIES FOR STUDYING

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	2	4.5000	2.2500	4.9550	.0084
WITHIN GROUPS	140	62.6643	.4541		
TOTAL	142	67.1643			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (2.5136) versus Group 2 (2.9141)

Group 3 (2.5136) versus Group 1 (3.0882)

	Mean
Group 1	3.0882
Group 2	2.9141
Group 3	2.5136

These results reflect the expected outcomes. The Wait list group has the highest mean.

II. RNA QUESTIONNAIRE-ITEMS 1-14

The following results are of a one way analysis of variance of the three groups (Wait List, Current and Graduate Students). Significant differences were found in four of the variables; Hope (Question #5), Work (Question #10), Preparation (Question #12) and Advancement (Question #14).

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences were found and are noted below. The response categories used the following 5 point Likert scale.

RESPONSE CATEGORIES (1-5)

1 = STRONGLY AGREE
2 = AGREE
3 = NEITHER AGREE OF DISAGREE
4 = DISAGREE
5 = STRONGLY DISAGREE

MEMBERSHIP CATEGORIES

1 = WAIT LIST (ACCEPTED)
2 = CURRENT (ALMOST COURSE COMPLETE)
3 = GRADUATES (WITHIN 1 YEAR)

TABLE XXI

Ques. #5. HOPE. (I am more hopeful about my future than one year ago).

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	6.9414	3.4707	6.0485	.0030
Within Groups	135	77.4644	.5738		
TOTAL	137	84.4058			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (2.2381) versus Group 2 (1.6047)

Group 3 (2.2381) versus Group 1 (1.6452)

MEAN	Group
1.6452	1
1.6047	2
2.2381	3

TABLE XXII

Ques. # 10. WORK (I expect to make a meaningful contribution through my work as an RNA.)

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	2.6225	1.3112	4.2255	.0166
Within Groups	134	41.5819	.3103		
TOTAL	136	44.2044			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (1.8095) versus Group 1 (1.3548)

MEAN	
1.3548	Group 1
1.5059	Group 2
1.8095	Group 3

TABLE XXIII

QUES. #12. PREPARATION (My training has prepared me/will prepare me well for employment.)

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	5.6424	2.8212	7.5273	.0008
Within Groups	135	50.5968	.3748		
TOTAL	137	56.2391			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.050 level were found:

Group 3 (2.000) versus Group 1 (1.3548)

Group 3 (2.000) versus Group 2 (1.5000)

MEAN	Group
1.3548	1
1.5000	2
2.000	3

TABLE XXIV

Ques. #14. ADVANCEMENT (My opportunities for career advancement have been/will have improved as a result of completing the RNA progam.)

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	7.5254	3.7627	5.7716	.0039
Within Groups	135	88.0108	.6519		
TOTAL	136	95.5362			

Post hoc comparisons using the Scheffe method were subsequently employed and the following pair-wise significant differences at the 0.05 level were found:

Group 3 (2.4762) versus Group 1 (1.7914)

Group 3 (2.4762) versus Group 2 (1.8837)

MEAN	Group
1.7914	1
1.8837	2
2.4762	3

These results indicate that the graduates who responded to the survey held a positive outlook on their training and their future. All grouped category responses were answered either with strongly agree or agree. Yet as a

group the graduates scored lower in their statements of agreement with the noted questions.

Research question #3

3. Is there a positive change between groups according to the following dimensions?

i) self-esteem/positive self-regard
ii) skill development
iii) income/job stability?

It was hypothesized by the investigator that the three dimensions noted above would be represented by a cluster of questions that fit together. A factor analysis confirmed this. The following questions were noted to cluster together.

1.Self-Esteem/Positive Self-Regard

Question #3. I have clear goals that are realistic and attainable.

Question #6. I have a positive feeling of self-esteem and self-worth.

Question #7. I will be able to make a meaningful contribution through my work as an RNA.

Question #9. I have a sense of personal achievement and accomplishment.

2. Skill Development

Question #5. I am more hopeful about my future.

Question #8. I expect to learn some important skills in my training.

Question #10. I will be able to make a meaningful contribution through my work as an RNA.

Question #11. Completion of the RNA Program will be worth the effort and personal sacrifice.

Question #12. My training will prepare me well for employment in the field.

Question #13. As an RNA, I expect to feel part of a professional group.

Question #14. My opportunites for career advancement will improve as a result of completing the RNA Program.

3. Income/Job Stability

Question #1. I feel that I will be able to support myself (and any dependents) on the salary that I can earn as an RNA.

Question #2. The yearly income that I can earn as an RNA is higher than what I have generally been able to earn previously.

Question #4. I have more self-confidence now than one year ago.

TABLE XXV

VARIMAX ROTATION

FACTORS ROTATED=3

COMMONALITIES BEFORE ROTATION

COLUMN	1	2	3	4	5
ROW 1	0.537	0.641	0.474	0.510	0.633

	6	7	8	9	10
ROW 1	0.622	0.529	0.587	0.555	0.570

	11	12	13	14
ROW 1	0.576	0.674	0.598	0.398

ROTATED FACTOR MATRIX

	H**2	1	2	3
TEST 1	0.537	0.153	0.109	0.709
TEST 2	0.641	0.064	-0.065	0.795
TEST 3	0.474	0.263	0.624	0.125
TEST 4	0.510	0.079	0.427	0.567
TEST 5	0.633	0.717	0.244	0.244
TEST 6	0.622	0.164	0.768	0.074
TEST 7	0.529	0.421	0.583	0.109
TEST 8	0.587	0.747	0.145	-0.092
TEST 9	0.555	0.159	0.712	0.153

TEST 10	0.570	0.701	0.280	-0.015
TEST 11	0.576	0.708	0.089	0.259
TEST 12	0.674	0.807	0.105	0.106
TEST 13	0.598	0.697	0.327	0.073
TEST 14	0.398	0.514	0.286	0.226
% COMMON VARIANCE		48.045	30.245	21.710
% TOTAL VARIANCE		27.124	17.075	12.257

TRANSFORMATION MATRIX

COLUMN	1	2	3
ROW 1	0.795	0.536	0.282
ROW 2	-0.400	0.115	0.909
ROW 3	-0.455	0.836	-0.306

Research question #4

Would student responses confirm that successful completion of the RNA Program has made a positive impact on their lives? And if so, how?

Question eleven of the RNA Questionnaire asks respondents to state the degree of agreement with the statement "Completion of the RNA program will be/has been worth the effort and personal sacrifice".

All three groups reported strong agreement with this statement. The Wait list group reported that 96.8% either strongly agree or agreed with this statement. The Current student group indicated 90.2% were in strong agreement or agreement with the statement. Similarly, the Graduate group reported 90.9% either strongly agreed or agreed with the statement.

There is clear support for the statement that completion of the RNA program would be/was worth the effort required. However, there is a noted shift between groups in response to the statement. The wait list group reports 67.7% strongly agreed while 29.0% agreed. In the current group 35.3% strongly agreed and 54.9% agreed. The graduate group reports 27.3% strongly agree and 63.6% agree with the statement.

The wait list group expresses a definite expectation that completion of the RNA progam will be worth the effort and personal sacrifice. The current students (who are close to graduation) and the graduate group remain positive about the program being worth the effort however there is a striking difference between the distribution of the strongly agree and the agree statements.

Question 21 asks "Do you expect that completion of the RNA program might make a positive difference in your life? How?"
The following are selected responses from the Wait list and Current groups:

(#075)
Yes. More aware of my own attitude and increased self-awareness.

(#890)
It will give me a sense of independence and increase the family income.

(#711)
Yes, it will give me an independence I've never had before.

Selected graduate responses:

(#270)
Yes. It has made me a member of the medical profession, taught me more skills, raised my income and most of all given me the opportunity to help people in need.

(#267)
Yes it has. I feel more confident and sure of myself now. I'm not scared to walk into a new situation (work or otherwise). I'm also making my own living. I feel very satisfied with the job I am doing.

(#167)
Yes, I really enjoy my work for now. I look forward to going to work. Also it has improved my finances.

(#759)
Yes, I am not as shy as I used to be. I also have a positive attitude towards life.

(#103)
Yes. I feel I don't have to rely on somebody else to pay the rent. I feel a lot better about myself than I did before I took the RNA course.

Students were also asked to describe their own struggles and accomplishments. The following quotation was used to assist them in answering the question.

"Success has been defined as 'Not so much by what we attain in life as by the obstacles that we have overcome in getting there'.(Booker T. Washington).

"Many of us can identify with this quotation to some extent. Within this context would you care to describe or share some of the personal challenges or difficult life experiences that you may have had to overcome in your own life?"

In order to provide an added dimension and human quality regarding the life circumstances of one of the students in the RNA program his responses on questions 19, 21 and 22 are provided. The following excerpt is a poignant representation of the type of student that AVC seeks to help.

(#20143)
Question 19. Why did you choose the RNA Program as a goal?

"I grew up on the street from the age of thirteen years. I put myself through school and worked. I have seen people hurting all my life and always wanted to help but didn't know how until I found out about the RNA program."

Question 21. Do you expect that completion of the RNA program might make a positive difference in your life? How?

"A change in lifestyle, maybe be able to afford a home, wife and children. And a sense of worth and self pride."

Question 22. Success has been defined as"not so much by what we accomplish in life as by the obstacles that we overcome in getting there". Within this context would you care to describe some of the personal challenges or difficult life experiences that you have had to overcome in your own life?

"Most people choose their paths in life (i.e. Bikers), me, I had it pushed upon me. I was the only one out of my family with a grade twelve and extra education. I managed to break away from the bad side...booze, drugs, jail, etc. It seems the more I accomplish the more I want to accomplish."

Several responses to this last question (#22) are noted

below.

(#134)
- -Death of a Parent
- -Divorce
- -Loss of a child
- -Financial loss

(#130)
- -Pregnancy at age nineteen
- -Rearing a baby on my own
- -unemployment

(#115)
My husband and I were challenged when he took his apprenticeship after we were married. We were terribly broke then, but we got through it. This is somewhat the same for us again, but we are managing. There is great pride in the fact that you did something despite the obstacles that mounted up in your way.

(#111)
Coming to this course. My first time leaving home to come to the big city. Coming into this course and not knowing anybody.

(#071)
My biggest personal challenge was accepting the fact that I was alone with my son to support. I had to stop blaming myself for the failure and really work hard to try and make a living for us.

(#100)
Going back to school at the age of forty-two.

(#070)
The obstacle that I had to overcome was a very difficult marriage ending in divorce leaving me with five children to support. This trial in my life has made me sensitive to others' needs.

(#069)
I came to Canada in 1982 so my first challenge was English language (I didn't speak English at all).

(#097)
Constantly putting up with someone putting you down.

(#007)
At the age of seven years I was diagnosed as having terminal Leukemia. I was able to undergo a bone marrow transplant which was successful.

Ten percent of the total responses have been provided here for question number twenty-two. The responses reveal the very real struggles that these students have dealt with in their lives. Aside from the perceived life difficulties there is a strong sense of pride at having dealt with the problems in an effective manner. In many cases respondents reported a lack of support and encouragement from significant others.

CHAPTER FIVE

DISCUSSION

The concluding chapter contains a discussion of the findings. Recommendations for further research are presented.

Three Work values demonstrate significant differences when the three groups (Wait-List, Current and Graduate students of the Edmonton RNA Program) are compared. Those Values are Authority, Risk-Taking and Physical Prowess.

It is interesting that the reported values for the Authority scale increased in the Graduate group. The findings are of interest as many RNA students will report to counsellors at AVC that they lack a sense of autonomy. Some students perceive themselves as vulnerable to the criticisms, as well as the marking system of their Nursing Instructors. Consequently students may not feel an alignment with authority structures within the educational system, and particularly during the period of time that they are students.

The differences shown for the Risk-Taking scale would be a sensible deductive response given the nature of the different groups. The current students reported that the pressure for conformity and compliance to

professional health care standards is a major focus in their coursework and in the hospital practicum settings.

Finally, a comment on the Physical Prowess scale is noteworthy. The RNA Program may be intellectually challenging to a number of students but it also requires good health and strength in order to physically lift and assist patients. Some students have remarked that while completing work experience training, especially in extended care facilities, RNA students seemed to be used for their physical labour with less than adequate emphasis on the theoretical aspects of their training.

SALIENCE INVENTORIES

Five significant differences were found between groups on the three Salience Scales (Participation, Committment and Opportunity) of the Life Roles Inventory. A discussion of the findings are presented.

PARTICIPATION

The current students indicate the highest level of participation in studying. This is predictable as they are engaged in a full time training program. It is also logical that the Wait list should demonstrate some

degree of participation in studying as a significant number have been upgrading their academic standing prior to applying for the RNA Program. The Graduate group demonstrates the lowest degree of participation in studying. They can now attend to working and other Life Role activities such as family and leisure activites.

Group three indicates the most participation in working. The Graduate group can now participate more fully in this life role domain as their training program is complete. Group two predictably indicates the lowest group response as they were engaged in a full time training program. Group one indicates a level of particpation in working that is between groups two and three. Many people on the wait list are employed while they await entrance into the RNA program.

Prospective students (Group one) report the highest level of participation in leisure activities. It is expected that Current students would have the least amount of time available for leisure or recreational activities. The graduates likely have slightly more time than when they were studying but also they may have more money to afford recreational activites.

COMITTMENT

The Wait list demonstrates a strong comittment to studying as they have applied to a training program requiring several hours of study daily, independent of classroom activities. The level of comittment and perhaps personal motivation may diminish somewhat as they near the end of training(Group two) and be lowest among the Graduate group. The responses to this question provide support for the theory of different stages of comittment to a course of studies as experienced by a student.

OPPORTUNITIES

The Wait list can see the greatest opportunity for studying in the future, as they have not commenced the training program. Conversely, the Graduate group indicates the lowest perception of opportunities for studying in the future. This is an expected outcome for many as they have completed their training and are no longer required to study.

RNA QUESTIONNAIRE (QUESTIONS 1-14)

A factor analysis confirmed the fourteen questions from the RNA Questionnaire are represented by a cluster of questions that fit together on three dimensions: self- esteem, skill development and income/job stability.

An analysis of variance with each of the three groups of participants confirmed between group differences on questions #5(Hopefulness about the future), #10(Expecting to make a meaningful contribution through working as an RNA), #12(Preparation for employment) and #14(Advancement).

The statement regarding hope for the future was valued most by the RNA students about to graduate. These students also made up the largest sample of the population. The students on the accepted wait-list had the lowest level of self-reported feelings of hopefulness for their future as compared to the previous year. These findings are important considering that it is often reported in the literature that subjects on a wait list for a treatment generally report a positive improvement in their lives if due to nothing more than the expectancy that treatment, and hence improvement, will be forthcoming.

QUES. #10. WORK (I expect to make a meaningful contribution through my work as an RNA.)

Group one, the Wait list, reports the highest level of expectations to make a meaningful contribution through their work as an RNA. There is then a gradual shift in the other categories, with the Graduate group reporting the lowest values for this question. This is possibly a realistic shift in perspective as graduates

encounter the practical constraints and limitations of the role of the RNA.

QUES. #12. PREPARATION (My training has prepared me/will prepare me well for employment.)

Again, Group one reports the highest level for this question as well. This group awaiting entrance to a nursing assistant program would logically have the expectation of receiving training that would prepare them well for employment. The shift in responses from Groups one to three may reflect the difficult economic factors of the current job market, especially in urban areas. Also, the limited scope of medical treatments which can be performed by RNAs as opposed to RNs and B.Sc. graduates is likely much more evident to Groups two and three.

QUES. #14. ADVANCEMENT (My opportunities for career advancement have been/will have improved as a result of completing the RNA progam.)

Group one indicates the greatest degree of agreement. Several factors are important to consider here. First of all the respondents from the Wait list may be considering that their opportunities for career advancement will improve as compared to the job that they were most recently employed in. For instance, if an individual had been working as a waitress earning minimum wage, she might feel that her career

advancement opportunities would be enhanced by obtaining employment as an RNA.

The RNA graduate working in an active treatment hospital may be acutely aware of the heirarchy which places the recent graduate at the bottom of the ladder. The opportunity for advancement is very limited within a nursing unit that is staffed by Registered Nurses and possibly B. Sc. Nursing graduates. Therefore, the graduate RNA responses are appropriate, given that there appears to be little opportunity for advancement within a health care setting, unless the individual is prepared to obtain further educational qualifications (i.e. completion of an R.N. program).

RNA QUESTIONNAIRE--OPEN-ENDED QUESTIONS(#19, 21, 22 & 24)

The RNA Questionnaire responses provide an insight into the expectations, attitudes and lifestyles of RNA students. Research findings indicate changes in attitude and perception as individuals move from the Wait list, to current students about to graduate, and finally as graduates who are working in the health care field as an RNA. These changes may well be part of a maturational or developmental process. The responses from the graduate group, which are noted in Chapter Four, provide support for the hypothesis that

completion of the RNA program has a positive impact upon the lives of the graduates.

FURTHER REFLECTIONS AND SUGGESTIONS FOR PROGRAM CHANGES

This study provided a means to test Super's theory in a vocational training centre. Using the Life Roles Inventory eight significant findings were noted on the Values Scale and the Salience Scales. These results lend support to the theoretical model of developmental changes that individuals may experience as they initiate and complete a training program and subsequently commence working.

Studying, as a Life Role, is a major factor with this population. Significant differences are noted when contrasting the three groups (Wait list, Current and Graduates) according to their degree of participation, comittment and opportunity for studying. The results may be predictable and somewhat expected, but there is utility and benefit in confirming the unsubstantiated postulate.

Many of the studies presented in the Literature Review may not be directly transferable to the population of Registered Nursing Assistants studied as most of the articles dealt with Registered Nurses or Bachelor of Science graduates in Nursing. Given the author's experience in working with RNA students the

findings of the studies noted below are thought to be applicable. However, inferences should be made cautiously until replication studies with RNA students can be completed.

Deback and Mentkowski (1986) call for higher educational requirements for para-professionals in the field of nursing. They argue that education promotes a higher range of abilities than does limited training and experience. The author would agree with this perspective. The trend toward higher education is expected to have a direct impact upon the nursing field in Alberta in the next two decades. There is a proposed change which would require Registered Nurses to have a four year B.Sc. in Nursing by the year 2000. As previously stated, the RNA entrance criteria will be changed in September of 1988. At that time a completed grade twelve (with an acceptable grade point average) will be required. The change to upgrade the RNA entrance criteria is viewed, by the author, as a positive move.

While much attention has been given to the level of academic standing of students and graduates of nursing programs there is an equally strong arguement for attending to the psycho-social needs of students. Schirwin (1977) states that less than 50% of the attrition rate of students in nursing programs can be

related solely to academic difficulties. In order to address some of the perceived barriers to educational success a number of studies have been completed utilizing various treatment modalities.

The multi-modal approach as described by Southern and Smith (1984) is somewhat similar to the approach used at AVC Edmonton in the RNA program for the past several years. Class presentations are made by Counsellors and other professionals regarding the following issues: self-concept, assertivesness, stress management, strategies for obtaining and maintaining employment (especially critical during the present economic downturn).

The participants of the RNA study indicated strong support for presentations or workshops on the following topics: self-esteem, stress management, assertiveness, time management, goal setting and team building. However, it is the author's opinion that an integrated multi-disciplinary approach would be preferable to the present (module) delivery system.

An approach similar to Olson, Gresley and Heater (1984) may be of benefit to the Edmonton RNA program. The authors propose that an eight week course designed to enhance students self-concept can be most effective by using a two-pronged approach. First, to target specific clinical skill objectives that are deemed

desirable nursing abilities, which are presently beyond the capabilities of the students. Second, to provide the students with work-related interpersonal skills (i.e. communication with co-workers, leadership and management techniques and other areas of professional development).

Southern and Smith as well as Olsen et al. report an increase in nursing students' self-concept, not simply as a result of bolstering the self-esteem of an individual student, but by enhancing feelings of self-competence in a nursing role. This can be accomplished through the development of critical nursing competencies, while also emphasizing the social interaction skills necessary for attaining maximum effectiveness in a nursing care environment where high stress factors are often prevalent. It may be necessary to require higher academic skill levels in order to teach increasingly sophisticated medical treatment procedures. The change requiring grade twelve as an admission criteria to the Edmonton RNA program will be of benefit in this regard.

The author suggests that a needs assessment be completed, and if deemed appropriate, a multi-modal course be developed to incorporate in a wholistic manner, all of the different topics that are presently

being delivered by staff members from various departments within the institution.

Another issue to be addressed is the need for ongoing career counselling. The Life Roles Inventory demonstrates that individuals in the RNA program likely will experience transitions in the various life roles as they move through the training program. For some individuals attaining the certificate as a Registered Nursing Assistant appears to be a final point for educational training. Other students may want to continue on to achieve more nursing related education (i.e. a Diploma as a Registered Nurse or a B. Sc. in Nursing). Harvey and France (1987) found that if needs are explored, along with specific individual interests the result could lead to greater job satisfaction, and ultimately to greater productivity.

It is critically important for the students to know that there are other options available regarding career choice. Information about receiving advance credit to community colleges could be provided by AVC Counsellors. The author recommends that a brief classroom presentation be made after the first two level examinations by a Counsellor in the Edmonton RNA Program. The purpose being to invite students to see the Cousellor on an individual basis, to discuss any concerns about the recent examinations, or perhaps to

explore future academic goals. The objective would be to try and match perceived academic and occupational needs of the student with other critical factors (i.e. age, aptitude, number of dependents, resources available-both financial and familial support, and degree of comittment). In addition to a counsellor interview, the Life Roles Inventory could assist the students in clarifying their present needs as well as identifying or confirming priorities for the future.

RECOMMENDATIONS FOR FURTHER RESEARCH

1. The investigator would recommend replication of this study be completed using the same instruments, with a subsequent set of students in each category at the Alberta Vocational Centre in Edmonton.

2. Given the nature of the philosophical differences between training centres, it is recommended that the study be replicated at AVC Calgary, as well as the other RNA training Centres in the province of Alberta.

3. The writer would recommend similar studies of RNAs be completed in Canada. This should include those performing similar job functions but using a different job title.

4. A follow-study is recommended for the individuals who do not complete the RNA program.

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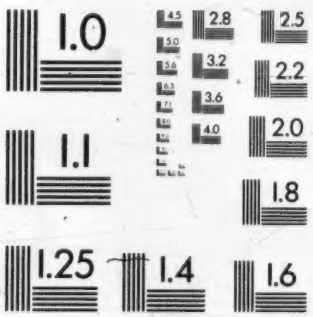

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Appendix A

REGISTERED NURSING ASSISTANT QUESTIONNAIRE

FORM ''A''-For Wait list and Current RNA Students

Please use the answer sheet on the second last page of the Life Roles Inventory entitled SPECIAL SURVEY SECTION. As you can see all answers are marked from A - E. Please use an HB pencil. For the first FOURTEEN questions mark your responses as follows:

A = STRONGLY AGREE
B = AGREE
C = NEITHER AGREE NOR DISAGREE
D = DISAGREE
E = STRONGLY DISAGREE

1. I feel that I will be able to support myself (and any dependents) on the salary that I can earn as an RNA.
2. The yearly income that I can earn as an RNA Grad is higher than what I have generally been able to earn previously.
3. I have clear goals that are realistic and attainable.
4. I have more self-confidence now than one year ago.
5. I am more hopeful about my future.
6. I have a positive feeling of self-esteem and self-worth.
7. I expect to be successful in my work.
8. I expect to learn some important skills in my training.
9. I have a sense of personal achievement and accomplishment.
10. I will be able to make a meaningful contribution through my work as an RNA.
11. Completion of the RNA Program will be worth the effort and personal sacrifice.
12. My training will prepare me well for employment in the field.
13. As an RNA, I expect to feel a part of a professional group.
14. My opportunities for career advancement will improve as a result of completing the RNA Program.

(Please respond to the following questions as indicated on the answer sheet.)

15. What will your total estimated family income be for 1986?

A) Less than $15,000
B) $15,000 - $24,999
C) $25,000 - $34,999
D) $35,000 - $44,999
E) $45,000 or more

16. How many dependents do you have?

A) None
B) One
C) Two
D) Three
E) More than three

17. Are you at present solely responsible for support of yourself and any family members?

A) Yes
B) No

18. Are you employed at present?

A) Yes
B) No

(The remaining questions are to be written out on this form and there are no answers to mark on the score sheet for these responses.)

19. Why did you choose RNA as a goal? _____

_____

_____

20. What kind of job would you like to have?

Short-Term (1 year from now) _____

_____

Long-Term (5 years from now) _____

_____

21. Do you expect that completion of the RNA course might make a positive difference in your life? How? _____

_____

_____

_____

_____

22. Success has been defined as "Not so much by what we attain in life as by the obstacles that we have overcome in getting there." (Booker T. Washington)

Many of us can identify with this quotation to some extent. Within this context would you care to describe or share some of the personal challenges or difficult life experiences that you may have had to overcome in your own life?

_____

_____

_____

_____

_____

23. What topics relating to interpersonal communication skills or personal development workshops that you would participate in for your own self development, if given the opportunity, i.e. self-esteem, assertiveness, team-building, stress management, goal setting, time management, please priorize.

i. _____ ii. _____

iii. _____ iv. _____

v. _____ vi. _____

24. Was there a single event or point that you experienced that was the deciding factor in your decision to take this training program? Please describe. _____

_____

_____

25. Would you be willing to participate in a brief personal interview with myself to provide additional information? A small random sample may be asked to take part in this type of research (realizing that confidentiality would be protected.)

I would willing to attend a half-hour interview: Yes _____ No _____

REGISTERED NURSING ASSISTANT QUESTIONNAIRE

FORM "B"-For RNA Graduates

Please use the answer sheet on the second last page of the Life Roles Inventory entitled SPECIAL SURVEY SECTION. As you can see all answers are marked from A - E. Please use an HB pencil. For the first FOURTEEN questions mark your responses as follows:

A = STRONGLY AGREE
B = AGREE
C = NEITHER AGREE NOR DISAGREE
D = DISAGREE
E = STRONGLY DISAGREE

1. I feel that I will be able to support myself (and any dependents) on the salary that I can earn as an RNA.
2. The yearly income that I can earn as an RNA Grad is higher than what I have generally been able to earn previously.
3. I have clear goals that are realistic and attainable.
4. I have more self-confidence now than one year ago.
5. I am more hopeful about my future.
6. I have a positive feeling of self-esteem and self-worth.
7. I expect to be successful in my work.
8. I have learned some important skills in my training.
9. I have a sense of personal achievement and accomplishment.
10. I will be able to make a meaningful contribution through my work as an RNA.
11. Completion of the RNA Program has been worth the effort and personal sacrifice.
12. My training has prepared me well for employment in the field.
13. As an RNA, I feel a part of a professional group.
14. My opportunities for career advancement will improve as a result of completing the RNA Program.

(Please respond to the following questions as indicated on the answer sheet.)

15. What will your total estimated family income be for 1986?

A) Less than $15,000
B) $15,000 - $24,999
C) $25,000 - $34,999
D) $35,000 - $44,999
E) $45,000 or more

16. How many dependents do you have?

A) None
B) One
C) Two
D) Three
E) More than three

17. Are you at present solely responsible for support of yourself and any family members?

A) Yes
B) No

18. Are you employed at present?

A) Yes
B) No

(The remaining questions are to be written out on this form and there are no answers to mark on the score sheet for these responses.)

19. Why did you choose RNA as a goal? _____

_____

_____

20. What kind of job would you like to have?

Short-Term (1 year from now) _____

_____

Long-Term (5 years from now) _____

_____

21. Has completion of the RNA course made a positive difference in your life? How? _____

_____

_____

_____

_____

22. Success has been defined as "Not so much by what we attain in life as by the obstacles that we have overcome in getting there." (Booker T. Washington)

Many of us can identify with this quotation to some extent. Within this context would you care to describe or share some of the personal challenges or difficult life experiences that you may have had to overcome in your own life?

_____

_____

_____

_____

_____

23. What topics relating to interpersonal communication skills or personal development workshops that you would participate in for your own self development, if given the opportunity, i.e. self-esteem, assertiveness, team-building, stress management, goal setting, time management, please priorize.

i. _____ ii. _____

iii. _____ iv. _____

v. _____ vi. _____

24. Was there a single event or point that you experienced that was the deciding factor in your decision to take this training program? Please describe. _____

_____

_____

25. Would you be willing to participate in a brief personal interview with myself to provide additional information? A small random sample may be asked to take part in this type of research (realizing that confidentiality would be protected.)

I would willing to attend a half-hour interview: Yes _____ No _____